



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

September 25, 2003

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Rexam Beverage Can Company / SSM 127-15603-00030

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot 9/16/03

**September 25, 2003**

Mr. Geoffrey Wortley  
Rexam Beverage Can Company  
8770 W. Bryn Mawr Avenue  
Chicago, Illinois 60631-3542

Re: 127-15603  
1<sup>st</sup> Significant Source Modification to:  
Part 70 permit No.: T127-7651-00030

Dear Mr. Wortley:

Rexam Beverage Can Company, located at 4001 Montdale Park Drive, Valparaiso, Indiana was issued Part 70 operating permit T127-7651-00030 on January 12, 1999 for an aluminum can ends manufacturing plant. An application to modify the source was received on February 15, 2002. The aluminum can end production increase from the following five (5) can end manufacturing lines is approved pursuant to 326 IAC 2-7-10.5:

- (1) One (1) existing can end manufacturing line, identified as Module #1, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (2) One (1) existing can end manufacturing line, identified as Module #2, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (3) One (1) existing can end manufacturing line, identified as Module #3, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (4) One (1) existing can end manufacturing line, identified as Module #4, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (5) One (1) existing can end manufacturing line, identified as Module #5, consisting of one (1) three lane conversion press, one (1) compound liner, tab lube application, and one (1) six out shell press, with a permitted maximum capacity of 120,000 ends per hour with no controls, and exhausting to the atmosphere. This capacity will be increased to 150,000 ends per hour.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions  
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.  
If you have any questions on this matter call (800) 451-6027, and ask for extension (3-4972), or dial  
(317) 233-4972.

Sincerely,

Original signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

APD

cc: File - Porter County  
Porter County Health Department  
Northwest Regional Office  
Air Compliance Section Inspector - Rick Massoels  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

# **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY**

**Rexam Beverage Can Company  
4001 Montdale Park Drive  
Valparaiso, Indiana 46383**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

|  |                                   |
|--|-----------------------------------|
| 1 <sup>st</sup> Significant Source Modification 127-15603  |                                   |
| Issued by: Original signed by Paul Dubenetzky<br>Paul Dubenetzky, Branch Chief<br>Permit Branch<br>Office of Air Quality | Issuance Date: September 25, 2003 |

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) existing can end manufacturing line, identified as Module #1, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (2) One (1) existing can end manufacturing line, identified as Module #2, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (3) One (1) existing can end manufacturing line, identified as Module #3, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (4) One (1) existing can end manufacturing line, identified as Module #4, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.

The end sealing compound operation from all modules is applied by a precise bead of compound sealant in the curl of the can end.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-3]

Pursuant to 326 IAC 8-2-3(b) (Can End Coating Operations), the emissions from the beverage can end coating operations, shall not discharge volatile organic compounds in excess of the following:

| Coating       | 326 IAC 8-2-3(b)(4) Limit (lb VOC/gal), less water |
|---------------|--|
| End Seal Coat | 3.7  |

#### D.1.2 Volatile Organic Compounds (VOC) Limitations [326 IAC 2-3]

The total amount of VOC usage from Module #1, Module #2, Module #3 and Module #4 can ends manufacturing lines, shall be limited to 5.25 tons per month. This limited usage is equivalent to 63.0 tons of VOC per year. Compliance with this condition and condition D.2.2 shall make 326 IAC 2-3, Emission Offset rule requirements not applicable.

#### D.1.3 General Reduction Requirements for Volatile Organic Compound [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, Best Available Control Technology (BACT), the Permittee shall not allow the discharge into the atmosphere of any volatile organic compound (VOC) in excess of 5.6 lbs VOC/gal of coating, excluding water delivered to the Tab Lube applicator.

#### D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to CP 127-4956-00030 issued on January 22, 1996, the can end sealing compound operation shall be considered in compliance with 326 IAC 6-3-2 provided the following conditions are met during the process operations:

- (a) The particulate matter (PM) emissions are not visibly detectable at the exhaust;

- (b) The PM emissions are not detectable on the rooftops; or
- (c) The PM emissions are not detectable on the ground.

**D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these can end manufacturing lines.

**Compliance Determination Requirements**

**D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)]**

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Conditions C.1 and D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**D.1.7 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**D.1.8 VOC Emissions**

Compliance with Condition D.1.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage in Modules #1, #2, #3, and #4 for the most recent previous month.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.1.9 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1, D.1.2 and D.1.3.
  - (1) The amount and VOC content of each coating material and tab lube used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) The cleanup solvent usage for each month;
  - (3) The total VOC usage for each month;
  - (4) The weight of VOCs emitted for each compliance period;
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.10 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (5) One (1) existing can end manufacturing line, identified as Module #5, consisting of one (1) three lane conversion press, one (1) compound liner, tab lube application, and one (1) six out shell press, with a permitted maximum capacity of 120,000 ends per hour with no controls, and exhausting to the atmosphere. This capacity will be increased to 150,000 ends per hour.

The end sealing compound operation from this module is applied by a precise bead of compound sealant in the curl of the can end.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-3]

Pursuant to 326 IAC 8-2-3(b) (Can End Coating Operations), the emissions from the Module #5 can end manufacturing line, shall not discharge volatile organic compounds in excess of the following:

| Coating       | 326 IAC 8-2-3(b)(4) Limit (lb VOC/gal), less water |
|---------------|--|
| End Seal Coat | 3.7  |

#### D.2.2 Volatile Organic Compounds (VOC) Limitations [326 IAC 2-3]

The total amount of VOC usage from the Module #5 can end manufacturing line shall be limited to 767.0 pounds per month. This limited usage is equivalent to 4.6 tons of VOC emissions per year. Compliance with this condition and condition D.1.2 shall make 326 IAC 2-3, Emission Offset rule requirements not applicable.

#### D.2.3 General Reduction Requirements for Volatile Organic Compound [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, Best Available Control Technology (BACT), the Permittee shall not allow the discharge into the atmosphere of any volatile organic compound (VOC) in excess of 5.6 lbs VOC/gal of coating, excluding water delivered to the Tab Lube applicator.

#### D.2.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to CP 127-4956-00030 issued on January 22, 1996, the can end sealing compound operation shall be considered in compliance with 326 IAC 6-3-2 provided the following conditions are met during the process operations:

- (a) The particulate matter (PM) emissions are not visibly detectable at the exhaust;
- (b) The PM emissions are not detectable on the rooftops; or
- (c) The PM emissions are not detectable on the ground.

#### D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

### Compliance Determination Requirements

#### D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in



compliance. If testing is required by IDEM, compliance with the VOC limit specified in Conditions C.1 and D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### **D.2.7 Volatile Organic Compounds (VOC)**

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Compliance with the VOC content and usage limitations contained in Conditions D.2.1, D.2.2, and D.2.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### **D.2.8 VOC Emissions**

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Compliance with Condition D.2.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage in Module #5 for the most recent previous month.

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### **D.2.9 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.2.1, D.2.2, and D.2.3 the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.2.1, D.2.2, and D.2.3:
- (1) The amount and VOC content of each coating material and tab lube used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) The cleanup solvent usage for each month;
  - (3) The total VOC usage for each month;
  - (4) The weight of VOCs emitted for each compliance period;
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.2.10 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Rexam Beverage Can Company  
Source Address: 4001 Montdale Park Drive, Valparaiso, IN 46383  
Mailing Address: 8770 West Bryn Mawr Avenue, Chicago, IL 60631-3504  
Part 70 Permit No.: T127-7651-00030  
Facility: Module # 1, 2, 3 and 4  
Parameter: VOC  
Limit: 5.25 tons/month

Quarter \_\_\_\_\_ YEAR: \_\_\_\_\_

| Month   | Module 1     | Module 2     | Module 3     | Module 4     | Mod 1+ Mod 2+ Mod 3+ Mod 4 |
|---------|--------------|--------------|--------------|--------------|----------------------------|
|         | Input<br>VOC | Input<br>VOC | Input<br>VOC | Input<br>VOC | Total                      |
| Month 1 |              |              |              |              |                            |
| Month 2 |              |              |              |              |                            |
| Month 3 |              |              |              |              |                            |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Rexam Beverage Can Company  
Source Address: 4001 Montdale Park Drive, Valparaiso, IN 46383  
Mailing Address: 8770 West Bryn Mawr Avenue, Chicago, IL 60631-3504  
Part 70 Permit No.: T127-7651-00030  
Facility: Module #5  
Parameter: VOC  
Limit: 767 pounds/month

Quarter \_\_\_\_\_ YEAR: \_\_\_\_\_

| Month   | Module #5<br>Input VOC |
|---------|------------------------|
| Month 1 |                        |
| Month 2 |                        |
| Month 3 |                        |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for a Part 70 Significant Source Modification and Significant Permit Modification

|  |   |
|--|---|
| Source Name:   | Rexam Beverage Can Company                    |
| Source Location:                                     | 4001 Montdale Park Drive, Valparaiso, Indiana |
| County:  | Porter  |
| SIC Code:  | 3411  |
| Operation Permit No.:                                | T127-7651-00030                               |
| 1 <sup>st</sup> Significant Source Modification No.: | 127-15603                                     |
| 1 <sup>st</sup> Significant Permit Modification No.: | 127-15629                                     |
| Permit Reviewer:                                     | Aida De Guzman                                |

On August 20, 2003, the Office of Air Quality (OAQ) had a notice published in the Times, Munster, Indiana, stating that Rexam Beverage Can Company had applied for a Significant Source and Permit Modification to increase the aluminum can end production. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

EPA has made the following comments, which were submitted via e-mail on August 28, 2003 (additions are **bolded** and deletions are ~~struck through~~ for emphasis).

Comment 1: The cover of the source modification is titled "Part 70 Operating Permit", however it appears that this is a Significant Source Modification. Please explain.

Response 1: Permit 127-15603-00030 cover page has a typographical error, the title should read "Part 70 Significant Source Modification". A change to the final permit will be made accordingly.

Comment 2: A comment was made in the TSD that the facility will be increasing production while their allowable emission rate remains constant. Could you please provide a brief explanation as to how this decrease in emissions per unit of production will be achieved?

Response 2: The source's emission is mainly coming from the Tab Lube application. The source has been continually optimizing this process in order to reduce the VOC emissions per unit. The source is averaging at 0.0000076 pound per can end and their actual VOC usage is averaging 47 tons per year.

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Part 70 Significant Source Modification**

#### **Source Background and Description**

|  |   |
|--|---|
| Source Name:   | Rexam Beverage Can Company                          |
| Source Location:                                     | 4001 Montdale Park Drive, Valparaiso, Indiana 46383 |
| County:  | Porter  |
| SIC Code:  | 3411  |
| Operation Permit No.:                                | T127-7651-00030                                     |
| Operation Permit Issuance Date:                      | January 12, 1999                                    |
| 1 <sup>st</sup> Significant Source Modification No.: | 127-15603   |
| Permit Reviewer:                                     | Aida De Guzman                                      |

The Office of Air Quality (OAQ) has reviewed a modification application from Rexam Beverage Can Company relating to the aluminum can end production increase from the following five (5) end manufacturing lines:

- (1) One (1) existing can end manufacturing line, identified as Module #1, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (2) One (1) existing can end manufacturing line, identified as Module #2, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (3) One (1) existing can end manufacturing line, identified as Module #3, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (4) One (1) existing can end manufacturing line, identified as Module #4, consisting of one (1) shell blanking press, four (4) HSL-8 lid liners, tab lube application, and three (3) conversion presses, with a permitted maximum capacity of 340,200 ends per hour, with no controls, and exhausting to the atmosphere. This capacity will be increased to 470,000 ends per hour.
- (5) One (1) existing can end manufacturing line, identified as Module #5, consisting of one (1)

three lane conversion press, one (1) compound liner, tab lube application, and one (1) six out shell press, with a permitted maximum capacity of 120,000 ends per hour with no controls, and exhausting to the atmosphere. This capacity will be increased to 150,000 ends per hour.

The end sealing compound operation from all five (5) modules is applied by a precise bead of compound sealant in the curl of the can end.

## History

On February 15, 2002, Rexam Beverage Can Company submitted an application to the OAQ requesting to increase all can ends manufacturing lines. Rexam Beverage Can Company was issued a Part 70 permit on January 12, 1999. On February 21, 2000, Rexam Beverage Can Company was issued the First Minor Source Modification 127-11554, and the First Minor Permit Modification 127-11743 was issued on March 20, 2000.

## Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 15, 2002.

## Emission Calculations

The source was issued the following permits, which outlines the changes made to the plant that will affect the proposed modification (production increase):

- (a) Original Permit - CP (64) 1649, issued on August 31, 1989 for:  
4 shell presses each with 4,400 can ends/minute capacity, and 16 speed liners.
- |  |   |   |
|--|---|---|
| 4,400 can ends/min * 60 min/hr * 4 presses | = | 1,056,000 can ends/hr total                                     |
| Can End Liners VOC Emission limit          | - | 3.7 lb/gal 5 326 IAC 8-2-3                                      |
| End Seal Compound VOC Content limit        | - | 3.2 lb/gal < water  |
|  |   | 5,208 gal/mo usage limit which corresponds to < 100 tons/VOC/yr |
| Actual VOC Emissions                       | - | 42.8 tons/year  |
- (b) CP 127-4956-00030 - issued on January 22, 1996  
Replacing 13 lid liners with the following:
- |          |          |                                      |
|----------|----------|--------------------------------------|
| Module 1 | <b>6</b> | 4 lid liners                         |
| Module 2 | <b>6</b> | 4 lid liners                         |
| Module 3 | <b>6</b> | 4 lid liners                         |
| Module 4 | <b>6</b> | <u>4 lid liners</u><br>16 lid liners |
- |  |   |                         |
|--|---|-------------------------|
| Each liner <b>6</b> 79,000 can ends/hr * 16 liners | = | 1,264,000 ends/hr total |
| Allowable <b>6</b> 42.8 tons/year + 24.8 tons/yr   | = | 67.6 tons VOC/year      |

- (c) Title V 127-7651-00030 - issued January 12, 1999  
Added Module 5 with 4 liners  
Capacity - 120,000 can ends/hour  
Source's Current Capacity - 1,264,000 can ends/hour

$$\text{Title V } 6 \text{ } 340,200 \text{ ends/hr} \times 4 \text{ modules} = 1,360,800 \text{ can ends/hour} + 120,000 \text{ can ends/hr for module 5}$$

The current limit of 24.8 tons/year for module 1 - 4 was revised to reflect actual of 20.2 tons/year. Module 5 was limited to 4.7 tons/year to avoid 326 IAC 2-3.

- (d) Proposed Modification:

$$\begin{aligned} \text{From: } 340,200 \text{ ends/hr modules 1 thru 4} &= 1,360,800 \text{ can ends/hour} \\ \text{To: } 470,000 \text{ ends/hr} \times 4 &= 1,880,000 \text{ can ends/hr} \end{aligned}$$

$$\begin{aligned} \text{From: } 120,000 \text{ ends/hr module 5} \\ \text{To: } 150,000 \text{ ends/hr} \end{aligned}$$

$$\begin{aligned} \text{Proposed Total Capacity} &= 1,880,000 \text{ can ends/hr} + 150,000 \text{ can ends/hr} \\ &= 2,030,000 \text{ can ends/hr} \end{aligned}$$

Can End Manufacturing Modules, Module #1 through Module #5: See Page 1 of 1 TSD Appendix A of this document for detailed Unlimited PTE Emission calculations.

- (1) Current Allowable VOC Emissions = 67.6 tons/yr  
(2) New Unlimited PTE VOC (5 Can End Modules) = 78.64 tons/yr  
(3) Although the 5 can end modules capacity has been increased, the source requested that their source-wide VOC emissions will stay the same at 67.6 tons/year. Therefore, no increase in emissions will result from the modification.

### Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant       | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM              | 0.0                           |
| PM-10           | 0.0                           |
| SO <sub>2</sub> | 0.0                           |
| VOC             | 78.64                         |
| CO              | 0.0                           |
| NO <sub>x</sub> | 0.0                           |

### Justification for Modification

The Part 70 Operating permit is being modified through a Significant Source Modification,

pursuant to 326 IAC 2-7-10.5(f)(2), "modification that is subject to 326 IAC 8-1-6".

### County Attainment Status

The source is located in Porter County.

| Pollutant       | Status         |
|-----------------|----------------|
| PM-10           | unclassifiable |
| SO <sub>2</sub> | unclassifiable |
| NO <sub>2</sub> | attainment     |
| Ozone           | severe         |
| CO              | attainment     |
| Lead            | not designated |

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as severe nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Porter County has been classified as unclassifiable for PM10 and SO<sub>2</sub>, and attainment for the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon limits as referenced in the TSD of the Part 70 Permit (127-7651-00030):

| Pollutant       | Emissions (tons/year) |
|-----------------|-----------------------|
| PM              | -                     |
| PM-10           | -                     |
| SO <sub>2</sub> | -                     |
| VOC             | 67.6                  |
| CO              | -                     |
| NO <sub>x</sub> |                       |

- (a) This existing source is a major stationary source because volatile organic compounds (VOC) a severe nonattainment regulated pollutant is emitted at a rate of 25 tons per year or more, and it is not one of the 28 listed source categories.

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.



|                           | Potential to Emit<br>(tons/year) |       |                 |      |     |                 |
|---------------------------|----------------------------------|-------|-----------------|------|-----|-----------------|
| Process/facility          | PM                               | PM-10 | SO <sub>2</sub> | VOC  | CO  | NO <sub>x</sub> |
| Proposed Modification     | -                                | -     | -               | **   | -   | -               |
| Contemporaneous Increases | -                                | -     | -               | -    | -   | -               |
| Contemporaneous Decreases | -                                | -     | -               | -    | -   | -               |
| Net Emissions Increase    | -                                | -     | -               | 0.0  |     | -               |
| Offset Significant Levels | -                                | -     | -               | 25.0 | -   | -               |
| PSD Significant Levels    | 25.0                             | 15.0  | 40.0            | -    | 100 | 40              |

  

|                                    |   |   |   |      |   |   |
|------------------------------------|---|---|---|------|---|---|
| PTE After Issuance of Modification | - | - | - | 67.6 | - | - |
|------------------------------------|---|---|---|------|---|---|

\*\* The source requested that their source-wide VOC emissions will stay the same at 67.6 tons/year. Therefore, no increase in emissions will result from the modification.

- (a) This modification to an existing major stationary source is not major because no emission increase will result from the modification. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.
- (b) This modification to an existing major source for VOC is not major source for PM, PM10, SO<sub>2</sub>, CO and NO<sub>x</sub> because there is no emission increase for these attainment pollutants. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

### Federal Rule Applicability

- (a) New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60):
  - (1) 40 CFR 60.490, Subpart WW - Standard of Performance for the Beverage Can Surface Coating Industry - This rule is applicable to each exterior base coat operation, each overvarnish coating operation and each inside spray coating operation in a beverage can surface coating lines.  
  
Rexam Beverage Can Company is not subject to the requirements of this the New Source Performance Standard (40 CFR 60.490, Subpart WW), because they do not perform exterior base coating, overvarnish coating or inside spray coating operations. This non-applicability determination was made during the review of CP 127-4956-00030, issued on January 22, 1996.
  - (2) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60 applicable to this proposed modification.

- (b) National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 14, (40 CFR 63):
- (1) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) applicable for this modification.

**State Rule Applicability -Entire Source**

- (a) 326 IAC 5-1 (Visible Emissions Limitations). Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**State Rule Applicability - Individual Facilities**

- (a) 326 IAC 8-2-3 (Can End Coating Operations)
- (1) Can end coating emission limitations as specified under 326 IAC 8-2-3 are applicable to facilities in Porter County which commenced operations after January 1, 1980 and have potential emissions of 25 tons per year or greater. Pursuant to 326 IAC 8-2-3(b), the emissions from the beverage can end coating operations shall not discharge volatile organic compounds in excess of the following:

| Coating       | 326 IAC 8-2-3(b)(4) Limit (lb VOC/gal), less water |
|---------------|--|
| End Seal Coat | 3.7  |

The pounds of VOC per gallon of coating, less water, delivered to the applicator for the Can End Sealing Compound are less than the 326 IAC 8-2-3 limit, therefore, each coating complies with this rule (See page 1 of 1 TSD Appendix A for detailed calculations. **Note: The Tab Lube is not an end sealing compound, therefore, it is not subject to 326 IAC 8-2-3.**

- (b) 326 IAC 8-1-6 (General Reduction Requirements)  
The Tab Lubricant (Tab Lube) application is not one of the operations listed in 326 IAC 8-2-3. Therefore, it will be subject to 326 IAC 8-1-6, since its VOC potential emissions are greater than 25 tons per year and was installed after January 1, 1980.

In the 1996 permit the Tab Lube operation was overlooked and was not subjected to 326 IAC 8-1-6.

The source submitted the following BACT analysis:

The BACT analysis for VOC submitted by Rexam Beverage Can Company has been

conducted in accordance with the “Top Down BACT Guidance” U.S. EPA .

- (1) Rexam identified all can end making sources in the United States. The following are the findings:

| Sources & Addresses                                       | BACT/VOC Limit on the Tab Lube  |
|---|---|
| Ball Metal Beverage Container Corp.- Golden Colorado      | *Low VOC Tab Lube for Low Speed Press Systems Only                              |
| Crown Cork & Seal Company, Inc. - Batesville, Mississippi | 9.07 lb/hr and 2.98 tons/month  |
| Crown Cork & Seal Company, Inc. - Olympia, Washington     | None  |
| Crown Cork & Seal Company, Inc. - Winchester, Virginia    | 5.6 lbs VOC/gal of coating excluding water (No controls)                        |
| Metal Container Corporation, Inc.- Gainesville, Florida   | 6.0 lbs VOC/gal of coating excluding water                                      |
| Metal Packaging International - Northglenn, Colorado      | Tab Lube not Mentioned in the Permit  |
| Metal Container Corporation - Riverside, California       | EPA proposed $1.2 \times 10^{-5}$ lbs/can end produced, which was not finalized |
| Rexam Beverage Can Corporation Proposed Modification      | 5.6 lbs VOC/gal of coating excluding water                                      |

\* Low VOC Tab Lube is only used for the low speed press systems. It was attempted to use it on the high speed press systems but failed due to increase maintenance requirements, similar to what Rexam has experienced with its high speed press systems.

- (2) RACT/BACTLAER Clearinghouse -  
The source analysis includes control technologies from sources found in the RACT/BACTLAER Clearinghouse database. Only two (2) sources (Silgan Containers Corporation in Minnesota, and American National Can Company also in Minnesota) were found in the database for the Can End Sealing Compound, however, none was found for the Tab Lube operation.
- (3) Low VOC Tab Lube -  
Using low VOC Tab Lube is not technically feasible for Rexam, as it has been tested on Rexam’s high speed press systems and caused significant increase in the maintenance and compromised product quality. To use low VOC tab Lube

would cost Rexam \$5,932 per ton of VOC emitted (\$400,400/yr / 67.6 tons/yr), which is not cost effective.

- (4) Capture and Control Unit -  
No source in this can manufacturing industry has installed capture and control devices for the Tab Lube operation, because the evaporation rate is extremely slow, with volatilization continuing to occur long after the end is manufactured.

### **BACT LIMIT**

Rexam has eliminated the use of VOC based can end seal compound. However, the source cannot eliminate using the standard VOC based Tab Lube material being used in the operation, as the use of a low VOC Tab Lube to its operation is not technically and economically feasible. Therefore, pursuant to 326 IAC 8-1-6, the BACT for the Tab Lube operation shall be a limit of 5.6 lbs VOC/gal of coating excluding water.

- (b) 326 IAC 6-3-2 (Process Operations)  
There are no particulate matter (PM) overspray emissions from the can end sealing compound operation. The compound lining machine applies a very precise bead of compound sealant in the curl of the can end with the compound transfer efficiency of 99%. The compound left in the guns, which is then washed, and leftover on the spoilage ends represent the 1% of the compound that is wasted and not as overspray.

The following determination made in CP 127-4956-00030, issued on January 22, 1996 shall still apply to the can end sealing compound.

The can end sealing compound operation shall be considered in compliance with 326 IAC 6-3-2 provided the following conditions are met during the process operations:

- (1) The particulate matter (PM) emissions are not visibly detectable at the exhaust;
- (2) The PM emissions are not detectable on the rooftops; or
- (3) The PM emissions are not detectable on the ground.

### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for

enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

## **Conclusion**

The construction of this proposed modification shall be subject to the conditions of the attached **Part 70 Significant Source Modification No.127-15603-00030.**

Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations

Company Name: Rexam Beverage Can Company  
Address City IN : 4001 Montdale Park Drive, Valparaiso, IN 46383  
Minor Source M: 127-15603  
Plant ID No.: 127-00030  
Reviewer: Aida De Guzman  
Date Application February 15, 2002

| Material  | Density (Lb/Gal) | Weight % Volatile (H2O & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Transfer Efficiency |
|---|------------------|------------------------------------|----------------|-------------------|----------------|---------------------------------|------------------------|---------------------|---|----------------------------------|-------------------------------|------------------------------|-----------------------------|--------------------------------|-------------------|---------------------|
| Can End Seal Compound                           |                  |                                    |                |                   |                |                                 |                        |                     |   |                                  |                               |                              |                             |                                |                   |                     |
| Darex 4208-66                                   | 10.3             | 34.00%                             | 34.0%          | 0.0%              | 41.8%          | 58.00%                          | 0.00000762             | 1880000.000         | 0.00  | 0.00                             | 0.00                          | 0.00                         | 0.00                        | 0.00                           | 0.00              | 100%                |
| Darex 4355HS LV                                 | 10.7             | 32.00%                             | 32.0%          | 0.0%              | 41.0%          | 59.00%                          | 0.00000803             | 1500000.000         | 0.00  | 0.00                             | 0.00                          | 0.00                         | 0.00                        | 0.00                           | 0.00              | 100%                |
| Tab Lube Lubricant (Tab is Part of the Can end) |                  |                                    |                |                   |                |                                 |                        |                     |   |                                  |                               |                              |                             |                                |                   |                     |
| AMCO 4880                                       | 6.35             | 87.60%                             | 0.0%           | 87.6%             | 0.0%           | 11.30%                          | 0.00000159             | 2030000.000         | 5.56  | 5.56                             | 17.95                         | 430.91                       | 78.64                       | 0.00                           | 49.23             | 100%                |

State Potential Emissions

Add worst case coating to all solvents  
Volume weighted Average

78.64

METHODOLOGY

Summation Coatings = Sum Coatings (Densitycoat \* Wt % Org. \* quantity of coatings, gal/unit ) / (1-vol % water \* Densitycoat/density water)  
Volume Weighted Average = Summation Coatings / Total coatings Used  
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used